Statement of Basis of the Federal Operating Permit

The Premcor Refining Group Inc.

Site Name: Valero Port Arthur Refinery
Area Name: DCU-844 Coker Complex
Physical Location: 1801 S Gulfway Drive
Nearest City: Port Arthur
County: Jefferson

Permit Number: O3992
Project Type: Minor Revision

The North American Industry Classification System (NAICS) Code: 324110
NAICS Name: Petroleum Refineries

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: June 2, 2023

Operating Permit
Basis of Determination

Description of Revisions
The Permit was revised as follows:

- Incorporated the latest version of NSR Permit 6825A/PSDTX49M2/N65 and GHGPSDTX167M1 issued on November 3, 2022.
- Removed Unit ID: SRU-547 from the permit, because Unit ID: E-05-SCOT represents the SRU-547 and the associated incinerator stack.
- Updated Unit ID description for E-05-SCOT to read “SRU 547 AND ASSOCIATED INCINERATOR STACK” as requested by applicant.
- Added NSPS Ja and MACT CC applicable requirements to delayed coking unit (Unit ID: CVS844).
- Added NSPS Ja and MACT DDDDD low-level specific applicable citations to the permit, for Unit IDs: DCU-844H1 and DCU844H2.

Permit Area Process Description

A process description of the new Delayed Coker Unit DCU-844 and new Sulfur Recovery Unit SRU-547 and its operation is presented as follows. These units will operate in the same general manner as the existing refinery DCU and SRU units.

DELAYED COKER UNIT
Typically, the charge to delayed Coker is the vacuum tower bottoms or vacuum residuals (resid) from the crude unit. Delayed coking is a thermal process where residuum material is rapidly heated and then thermally cracked in coke drums under set conditions of temperature and pressure. Products from the DCU are fuel gas, propane, butane, naphtha, light and heavy gas oil, and petroleum coke.

Part of the equipment on a Coker operates as a continuous process and is designed to process the gases and liquids produced. That equipment typically consists of a main fractionating column, furnaces, pumps, compressor, exchangers, vessels, and other fractionating towers.

The remaining equipment on a delayed Coker operates as a batch process and consists of:

1. the coke drums used to contain the coke produced from the charge
2. the water system used to cool and cut the coke from the drums
3. the conveyor system used to handle the coke.

SULFUR RECOVERY UNIT (SRU-547)
Conversion of H_2S to elemental sulfur is done by partial oxidation (combustion) in the reaction furnaces and catalytically in the reactors. Approximately 68% conversion of H_2S to elemental sulfur is achieved in the reaction furnaces, which are also referred to as the thermal reactors. In the modified Claus process, one third of the H_2S is converted to $S0_2$ using air or a mixture of air and oxygen. The hot gases are cooled in a waste heat boiler before passing through a series of catalytic reactors that complete the reaction at lower temperatures. Sulfur formed in the thermal reactors and catalytic reactors is condensed by raising steam in a series of sulfur condensers. The molten sulfur flows through steam jacketed lines to the sulfur pit where it is degassed and shipped out by truck. An on-line analyzer/controller measures the ratio of H_2S to $S0_2$ in the Claus tail-gas and adjusts the air/oxygen flow to maintain the optimum H_2S to $S0_2$ ratio to maximize sulfur production. The tail-gas is charged to the tail-gas cleanup unit.

Liquid sulfur is pumped to a degassing reactor. In the reactor, molten sulfur is agitated with compressed air to strip out H_2S. The stripped sulfur then gravity flows from the reactor to a pit which is divided by a weir wall to keep un-degassed sulfur and degassed sulfur segregated. The spent air (air/H_2S mixture) from the degassing reactor is sent to the front end of the Claus Thermal Reactor for recovery of the H_2S as product sulfur.

SCOT PROCESS
The tail-gas cleanup unit utilizes the SCOT process (Shell Claus Off-gas Treating) to remove additional sulfur compounds from the tail-gas and recycle them back to the Claus unit for conversion to elemental sulfur. When fitted with a tail-gas cleanup unit, overall sulfur recovery can exceed 99.8%. The process consists of a reduction section in which all sulfur compounds present in the tail gas from the CLAUS Units are combined with hydrogen, heated, and catalytically converted to H_2S. The primary reaction converts $S0_2$ to H_2S and any elemental sulfur present to H_2S. Also, COS (carbonyl sulfide)

and CS_2 (carbon disulfide) are converted to H_2S. All reactions are exothermic, resulting in a temperature rise across the SCOT reactors. After cooling and moisture removal in a water wash column, the H_2S is concentrated in an MDEA based amine unit consisting of an absorber and regenerator. The treated vent gas from the absorber overhead is incinerated, cooled in a waste heat boiler, and vented through the stack. Concentrated H_2S from the regenerator overhead condenser is recycled back to the front end of the Claus unit.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1498

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO_2, PM, NO_X, HAP_S, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list
- Appendix B
    - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on an OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table is based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972, which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirements Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	Yes

Regulatory Program	Applicability (Yes/No)
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO_2 Trading Program)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the “Permit Shield” attachment of the permit.

Insignificant Activities and Emission Units

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

De Minimis Sources

1. Sources identified in the “De Minimis Facilities or Sources” list maintained by TCEQ. The list is available at https://www.tceq.texas.gov/permitting/air/newsourcereview/de_minimis.html.

Miscellaneous Sources

2. Office activities such as photocopying, blueprint copying, and photographic processes.
3. Outdoor barbecue pits, campfires, and fireplaces.
4. Storage and handling of sealed portable containers, cylinders, or sealed drums.
5. Vehicle exhaust from maintenance or repair shops.
6. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
7. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.

8. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
9. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
10. Well cellars.
11. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
12. Equipment used exclusively for the melting or application of wax.
13. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
14. Battery recharging areas.

Sources Authorized by 30 TAC Chapter 106, Permits by Rule

15. Sources authorized by §106.102: Combustion units designed and used exclusively for comfort heating purposes employing liquid petroleum gas, natural gas, solid wood, or distillate fuel oil.
16. Sources authorized by §106.122: Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
17. Sources authorized by §106.141: Batch mixers with rated capacity of 27 cubic feet or less for mixing cement, sand, aggregate, lime, gypsum, additives, and/or water to produce concrete, grout, stucco, mortar, or other similar products.
18. Sources authorized by §106.143: Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds where the deposits of sand and gravel are consolidated granular materials resulting from natural disintegration of rock and stone and have a production rate of 500 tons per hour or less.
19. Sources authorized by §106.148: Railcar or truck unloading of wet sand, gravel, aggregate, coal, lignite, and scrap iron or scrap steel (but not including metal ores, metal oxides, battery parts, or fine dry materials) into trucks or other railcars for transportation to other locations.
20. Sources authorized by §106.149: Sand and gravel production facilities that obtain material from deposits of sand and gravel consisting of natural disintegration of rock and stone, provided that crushing or breaking operations are not used, and no blasting is conducted to obtain the material.
21. Sources authorized by §106.161: Animal feeding operations which confine animals in numbers specified and any associated on-site feed handling and/or feed millings operations, not including caged laying and caged pullet operations.
22. Sources authorized by §106.162: Livestock auction sales facilities.
23. Sources authorized by §106.163: All animal racing facilities, domestic animal shelters, zoos, and their associated confinement areas, stables, feeding areas, and waste collection and treatment facilities, other than incineration units.
24. Sources authorized by §106.229: Equipment used exclusively for the dyeing or stripping of textiles.
25. Sources authorized by §106.241: Any facility where animals or poultry are slaughtered and prepared for human consumption provided that waste products such as blood, offal, and feathers are stored in such a manner as to prevent the creation of a nuisance condition and these waste products are removed from the premises daily or stored under refrigeration.
26. Sources authorized by §106.242: Equipment used in eating establishments for the purpose of preparing food for human consumption.
27. Sources authorized by §106.243: Smokehouses in which the maximum horizontal inside cross-sectional area does not exceed 100 square feet.
28. Sources authorized by §106.244: Ovens, mixers, blenders, barbecue pits, and cookers if the products are edible and intended for human consumption.
29. Sources authorized by §106.266: Vacuum cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
30. Sources authorized by §106.301: Aqueous fertilizer storage tanks.
31. Sources authorized by §106.313: All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
32. Sources authorized by §106.316: Equipment used for inspection of metal products.
33. Sources authorized by §106.317: Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
34. Sources authorized by §106.318: Die casting machines.
35. Sources authorized by §106.319: Foundry sand mold forming equipment to which no heat is applied.

36. Sources authorized by §106.331: Equipment used exclusively to package pharmaceuticals and cosmetics or to coat pharmaceutical tablets.
37. Sources authorized by §106.333: Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives.
38. Sources authorized by §106.372: Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
39. Sources authorized by §106.391: Presses used for the curing of rubber products and plastic products.
40. Sources authorized by §106.394: Equipment used for compression molding and injection molding of plastics.
41. Sources authorized by §106.414: Equipment used exclusively for the packaging of lubricants or greases.
42. Sources authorized by §106.415: Laundry dryers, extractors, and tumblers used for fabrics cleaned with water solutions of bleach or detergents.
43. Sources authorized by §106.431: Equipment used exclusively to mill or grind coatings and molding compounds where all materials charged are in paste form.
44. Sources authorized by §106.432: Containers, reservoirs, or tanks used exclusively for dipping operations for coating objects with oils, waxes, or greases where no organic solvents, diluents, or thinners are used; or dipping operations for applying coatings of natural or synthetic resins which contain no organic solvents.
45. Sources authorized by §106.451: Blast cleaning equipment using a suspension of abrasives in water.
46. Sources authorized by §106.453: Equipment used for washing or drying products fabricated from metal or glass, provided no volatile organic materials are used in the process and no oil or solid fuel is burned.
47. Sources authorized by §106.471: Equipment used exclusively to store or hold dry natural gas.
48. Sources authorized by §106.531: Sewage treatment facilities, excluding combustion or incineration equipment, land farms, or grease trap waste handling or treatment facilities.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping, and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T-112	30 TAC Chapter 115, Storage of VOCs	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Crude oil and/or condensate Storage Capacity = Capacity is greater than 40,000 gallons Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized	
T-112	40 CFR Part 60, Subpart Kb	60Kb-02	Product Stored = Crude oil stored, processed, and/or treated after custody transfer Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia	
T-112	40 CFR Part 63, Subpart CC	63CC-2	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1)-(6). Subject to 40 CFR Part 63 Subparts F, G, H, or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Group 1 Applicability = The storage vessel is also subject to 40 CFR Part 60, Subpart Kb and is complying with that rule Product Stored = Crude oil Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia	
T-113	30 TAC Chapter 115,	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Storage of VOCs		Product Stored = Crude oil and/or condensate Storage Capacity = Capacity is greater than 40,000 gallons Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized	
T-113	40 CFR Part 60, Subpart Kb	60Kb-02	Product Stored = Crude oil stored, processed, and/or treated after custody transfer Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia	
T-113	40 CFR Part 63, Subpart CC	63CC-2	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1)-(6). Subject to 40 CFR Part 63 Subparts F, G, H, or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Group 1 Applicability = The storage vessel is also subject to 40 CFR Part 60, Subpart Kb and is complying with that rule Product Stored = Crude oil Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia	
T-114	30 TAC Chapter 115, Storage of VOCs	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Crude oil and/or condensate Storage Capacity = Capacity is greater than 40,000 gallons Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Primary Seal = Mechanical shoe Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized	
T-114	40 CFR Part 60, Subpart Kb	60Kb-02	Product Stored = Crude oil stored, processed, and/or treated after custody transfer Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia	
T-114	40 CFR Part 63, Subpart CC	63CC-2	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1)-(6). Subject to 40 CFR Part 63 Subparts F, G, H, or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Group 1 Applicability = The storage vessel is also subject to 40 CFR Part 60, Subpart Kb and is complying with that rule Product Stored = Crude oil Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia	
T-37	30 TAC Chapter 115, Storage of VOCs	R5112-4	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia	
T-37	40 CFR Part 60, Subpart Kb	60Kb-04	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
T-37	40 CFR Part 63, Subpart CC	63CC-3	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1)-(6). Subject to 40 CFR Part 63 Subparts F, G, H, or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Group 2 Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.	
T-8002	30 TAC Chapter 115, Storage of VOCs	R5112-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-8002	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-8400	30 TAC Chapter 115, Storage of VOCs	R5112-3	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons Tank Description = Tank using a submerged fill pipe and vapor recovery system True Vapor Pressure = True vapor pressure is less than 1.0 psia	
T-8400	40 CFR Part 60, Subpart Kb	60Kb-03	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 19,813 gallons but less than 39,890 gallons (capacity is greater than 75,000 liters but less than or equal to 151,000 liters) WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-8400	40 CFR Part 61, Subpart FF	61FF-1	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351. Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks. Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device. Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1)-(3). Closed Vent System and Control Device AMOC = Not using an alternate means of compliance Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device. Control Device Type/Operation = Carbon adsorption system that does not regenerate the carbon bed directly in the control device Engineering Calculations = Results of performance tests are used to demonstrate that the control device achieves emission limitation. Carbon Replacement Interval = The carbon in the carbon adsorption system is replaced when monitoring indicates breakthrough.	
T-8400	40 CFR Part 63, Subpart CC	63CC-3	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1)-(6). Subject to 40 CFR Part 63 Subparts F, G, H, or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Group 2 Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.	
DCU-844H1	30 TAC Chapter 117, Subchapter B	30TAC-01	Unit Type = Process heater Maximum Rated Capacity = MRC is greater than or equal to 200 MMBtu/hr RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1).	
DCU-844H1	40 CFR Part 63, Subpart DDDDD	63DDDDD-1	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
DCU-844H2	30 TAC Chapter 117, Subchapter B	30TAC-02	Unit Type = Process heater Maximum Rated Capacity = MRC is greater than or equal to 200 MMBtu/hr RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1).	
DCU-844H2	40 CFR Part 63, Subpart DDDDD	63DDDDD-1	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
E-05-SCOT	30 TAC Chapter 112, Sulfur Compounds	R2007-1	Sulfur Recovery Plant = The gas sweetening unit is using sulfur recovery. Stack Height = Effective stack height greater than or equal to the standard effective stack height.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPGGGAFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
GRPGGGAFUG	40 CFR Part 60, Subpart GGGa	60GGGA-ALL	SOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 40 CFR Part 60, Subpart GGGa with no alternate control or control device. Construction/Modification Date = After November 7, 2006 Affected Facility Covered by 40 CFR 60 Subparts VVa or KKK = Not subject to and controlled under any of the above regulations. Flare = Fugitive unit contains a flare. EEL = No equivalent emission limitation is used for a flare. Complying with 60.482-10a = Flares are complying with 60.482-10a. Closed-Vent (Or Vapor Collection) Systems = Fugitive unit contains a closed vent (or vapor collection) system. EEL = No equivalent emission limitation is used for a closed vent (or vapor collection) system. Complying with 60.482-10a = Closed vent (or vapor collection) system is complying with § 60.482-10a.	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD1	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = YES EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Pilot-Operated PRD = A pilot-operated pressure relief device is not used and controlled as described in § 63.648(j)(4)(ii) Balanced Bellows PRD = A balanced bellows pressure relied device is not used and controlled as described in §63.648(j)(4)(iii) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i)	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD10	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = YES EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) Control Device Type = All releases and potential leaks from a pressure relief device are routed back into the process 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Routing to Control = All leaks and releases from the pressure relief device are routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) Control Device Type = All releases and potential leaks from a pressure relief device are routed back into the process	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD11	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = YES EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) Control Device Type = All releases and potential leaks from a pressure relief device are routed to a fuel gas system 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Routing to Control = All leaks and releases from the pressure relief device are routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) Control Device Type = All releases and potential leaks from a pressure relief device are routed to a fuel gas system	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD2	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = YES EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device meets a condition in § 63.648(j)(5)(ii)-(vi)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			63.684(j)(5) Exemptions = The pressure relief device meets a condition in § 63.648(j)(5)(ii)-(vi)	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD3	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = NO EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Pilot-Operated PRD = A pilot-operated pressure relief device is used and controlled as described in § 63.648(j)(4)(ii) Control Device Type = Flare Continuous Operating Parameter Alternative = An approved alternative to the continuous operating parameter provisions of § 63.655(i) is not used	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD4	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = NO EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Pilot-Operated PRD = A pilot-operated pressure relief device is used and controlled as described in § 63.648(j)(4)(ii) Control Device Type = All releases and potential leaks from a pressure relief device are routed back into the process	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD5	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = NO EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Pilot-Operated PRD = A pilot-operated pressure relief device is used and controlled as described in § 63.648(j)(4)(ii) Control Device Type = All releases and potential leaks from a pressure relief device are routed to a fuel gas system	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD6	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = NO EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Pilot-Operated PRD = A pilot-operated pressure relief device is not used and controlled as described in § 63.648(j)(4)(ii) Balanced Bellows PRD = A balanced bellows pressure relied device is used and controlled as described in §63.648(j)(4)(iii) Control Device Type = Flare Continuous Operating Parameter Alternative = An approved alternative to the continuous operating parameter provisions of § 63.655(i) is not used	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD7	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = NO EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Pilot-Operated PRD = A pilot-operated pressure relief device is not used and controlled as described in § 63.648(j)(4)(ii) Balanced Bellows PRD = A balanced bellows pressure relied device is used and controlled as described in §63.648(j)(4)(iii)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Device Type = All releases and potential leaks from a pressure relief device are routed back into the process	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD8	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = NO EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are not routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Pilot-Operated PRD = A pilot-operated pressure relief device is not used and controlled as described in § 63.648(j)(4)(ii) Balanced Bellows PRD = A balanced bellows pressure relied device is used and controlled as described in §63.648(j)(4)(iii) Control Device Type = All releases and potential leaks from a pressure relief device are routed to a fuel gas system	
GRPGGGAFUG	40 CFR Part 63, Subpart CC	63CCVV-PRD9	EXISTING SOURCE = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = YES EQUIVALENT EMISSION LIMIT = NO COMPLYING WITH §60.482-8 = YES Routing to Control = All leaks and releases from the pressure relief device are routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) Control Device Type = Flare Continuous Operating Parameter Alternative = An approved alternative to the continuous operating parameter provisions of § 63.655(i) is not used 63.684(j)(5) Exemptions = The pressure relief device does not meet any condition in § 63.648(j)(5)(ii)-(vi) Routing to Control = All leaks and releases from the pressure relief device are routed to control device, process, or fuel gas system as described in § 63.648(j)(4)(i) Control Device Type = Flare Continuous Operating Parameter Alternative = An approved alternative to the continuous operating parameter provisions of § 63.655(i) is not used	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
CVS844	30 TAC Chapter 115, Vent Gas Controls	R5131-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust, or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable, and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration or Emission Rate at Maximum Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
E-05-SCOT	30 TAC Chapter 115, Vent Gas Controls	R5131-2	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
CVS844	40 CFR Part 60, Subpart Ja	60Ja-03	Facility Type = Sulfur recovery plant greater than 20 long tons per day. Construction/Modification Date = After June 24, 2008 DCU Construction/Modification Date = On or after September 12, 2012, for such activities defined in §60.100a(b)(3).	-- Affected Pollutant - N/A: Main Standard – Added citation § 60.103a(i) for manual build for the delayed coking unit. Monitoring/Testing – Added citation § 60.104a(c) because of the phrase “or as requested by the Administrator” which allows the Administrator to request a performance test at any time.
CVS844	40 CFR Part 63, Subpart CC	63CC-1	Coke Drum Standard = Meeting pressure limit for coke drum vessel Construction/Reconstruction Date = The heat exchange system is a new source	
DCU-844H1	40 CFR Part 60, Subpart Ja	60Ja-01	Facility Type = Process heater that is used for fuel gas combustion. Construction/Modification Date = After June 24, 2008 Sulfur Emission Limit = Owner or operator is choosing Sulfur Emission Limit in terms of ppmv H2S in fuel gas §60.107a(b) Exemption = The fuel gas combustion device is not eligible for the exemption in §60.107a(b) Common Source of Fuel Gas = The fuel gas combustion device uses a common source of gas as described in §60.107a(a)(2)(iv) Alternative Standard = The process heater does not meet the criteria or has not requested approval from the Administrator for a NOX emissions limit as described in §60.102a(i) Heater Capacity = The process heater is rated equal to or greater than 100 MMBtu/hr	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Heater Type = The unit is a forced draft process heater NOx Emission Limit = The owner or operator is choosing the NOx concentration emission limit	
DCU-844H2	40 CFR Part 60, Subpart Ja	60Ja-01	Facility Type = Process heater that is used for fuel gas combustion. Construction/Modification Date = After June 24, 2008 Sulfur Emission Limit = Owner or operator is choosing Sulfur Emission Limit in terms of ppmv H2S in fuel gas §60.107a(b) Exemption = The fuel gas combustion device is not eligible for the exemption in §60.107a(b) Common Source of Fuel Gas = The fuel gas combustion device uses a common source of gas as described in §60.107a(a)(2)(iv) Alternative Standard = The process heater does not meet the criteria or has not requested approval from the Administrator for a NOX emissions limit as described in §60.102a(i) Heater Capacity = The process heater is rated equal to or greater than 100 MMBtu/hr Heater Type = The unit is a forced draft process heater NOx Emission Limit = The owner or operator is choosing the NOx concentration emission limit	
E-05-SCOT	40 CFR Part 60, Subpart Ja	60Ja-02	Facility Type = Sulfur recovery plant greater than 20 long tons per day. Construction/Modification Date = After June 24, 2008 SRP SO2 Control = Plant utilizes an oxidation control, or a reduction control system followed by incineration. SRP Claus Unit = A regular Claus sulfur recovery plant Flow Rate Weighted Average = The sulfur recovery plant is not complying with the emission limits as a flow rate weighted average for a group of release points. O2 Monitoring Alt = The sulfur recovery plant is using a CPMS to measure and record the volumetric gas flow rate of ambient air supplied to the Claus burner in place of the requirements in §60.106a(a)(5).	
E-05-SCOT	40 CFR Part 63, Subpart UUU	63UUU-1	SRU Emission Limitation = New or existing Claus SRU subject to 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using an oxidation control system or reduction control system followed by incineration complying with 250 ppmv SO_2 emission limit SRU Alternate Monitoring = Not monitoring alternate parameters in accordance with § 63.1573(e) SRU Startup/Shutdown Emissions = Startup/shutdown emissions sent to thermal incinerator SRU Bypass Line = No bypass line serving the SRU.	

* - The “unit attributes” or operating conditions that determine what requirements apply
** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit (FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOPs are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Permit by Rule (PBR) registrations submitted by permittees are also available online through the link provided below. The following table specifies the PBRs that apply to the site.

The status of air permits, applications, and PBR registrations may be found by performing the appropriate search of the databases located at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: GHGPSDTX167M1	Issuance Date: 11/03/2022
PSD Permit No.: PSDTX49M2	Issuance Date: 11/03/2022
Nonattainment (NA) Permits	
NA Permit No.: N65	Issuance Date: 11/03/2022
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits by Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 6825A	Issuance Date: 11/03/2022

Permits by Rule

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the “as applicable” language. The “as applicable” language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

The permit holder is required to keep records for demonstrating compliance with PBRs in accordance with 30 TAC § 106.8 for the following categories:

- As stated in 30 TAC § 106.8(a), the permit holder is not required to keep records for de minimis sources as designated in 30 TAC § 116.119.
- As stated in 30 TAC § 106.8(b) for PBRs on the insignificant activities list, the permit holder is required to provide information that would demonstrate compliance with the general requirements of 30 TAC § 106.4.
- As stated in 30 TAC § 106.8(c) for all other PBRs, the permit holder must maintain sufficient records to demonstrate compliance with the general requirements specified in 30 TAC § 106.4 and to demonstrate compliance with the emission limits and any specific conditions of the PBR as applicable.

The PBR records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, or parametric monitoring. The PBR records also satisfy the federal operating permit periodic monitoring requirements of 30 TAC § 122.142(c) as they are representative of the emission unit’s compliance with 30 TAC Chapter 106.

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and

3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: E-05-SCOT	
Control Device ID No.: E-05-SCOT	Control Device Type: Sulfur recovery unit with incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R2007-1
Pollutant: SO_2	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Sulfur Dioxide Concentration	
Minimum Frequency: Four times per hour	
Averaging Period: One hour	
Deviation Limit: 2220 lbs SO_2/hr	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO_2 concentration with procedures such as EPA Test Method 6C. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard.	

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (https://www.tceq.texas.gov/goto/cfr-online). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceq.texas.gov/permitting/air/nav/air_pbr.html

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes

OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes
OP-UA64 - Coal Preparation Plant Attributes